

Safety Attribute Inspection (SAI) Data Collection Tool

4.2.8 Simulators / Training Devices (AW)

ELEMENT SUMMARY INFORMATION

Purpose of this Element (certificate holder's responsibility):

- To ensure the certificate holder's manual includes; policies, procedures, instructions and information necessary to ensure that airplane simulators, training devices and training aids meet the requirements of its FAA Approved Training Program.

Objective (FAA oversight):

- To determine if the certificate holder's Simulators / Training Devices process meets all applicable requirements of the Federal Aviation Regulations and FAA policies.
- To determine if the certificate holder's Simulators / Training Devices process incorporates the safety attributes.
- To identify any shortfalls in the certificate holder's Simulators / Training Devices process.

Specific Instructions:

- Intentionally left blank

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirements (SRRs):

- SRRs:
 - 121.135(a)(1)
 - 121.135(b)(1)
 - 121.135(b)(16)
 - 121.135(b)(2)
 - 121.135(b)(3)
 - 121.407(a)
 - 121.407(a)(2)
 - 121.407(a)(3)
 - 121.407(a)(5)
 - 121.407(c)
 - 121.407(d)
 - 121.409(b)
 - 121.409(d)
 - SFAR 58.9(a)(3)
 - SFAR 58.9(a)(3)(i)
 - SFAR 58.9(a)(3)(ii)
 - SFAR 58.9(a)(3)(iii)
 - SFAR 58.9(b)(3)

Related CFRs & FAA Policy/Guidance:

- Related CFRs:
 - Intentionally left blank
- FAA Policy/Guidance:

- FAA Policy/Guidance:
Intentionally Left Blank

SAI SECTION 1 - PROCEDURES ATTRIBUTE

Objective: Procedures, instructions, and information contained in the certificate holder's manual are documented methods for accomplishing a process. Policies contained in the certificate holder's manual should establish the certificate holder's compliance posture. Policies may not be stand-alone statements but may be imbedded within procedures, instructions, or information regarding a particular regulatory requirement. The questions in this section of the data collection tool (DCT) are designed to assist the inspector in determining if the certificate holder's manual has documented or prescribed methods of accomplishing the process requirements that provide answers to the associated questions regarding who, what, when, where, and how. This section contains policy questions, procedural questions, and instructional or informational questions pertaining to various types of certificate holder requirements such as actions, prohibitions, or resources (i.e., personnel, facilities, equipment, technical data, etc.).

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1	Review the information listed in the Supplemental Information section of this data collection tool.
2	Review the duties and responsibilities for management and other personnel identified by the Certificate Holder who accomplish the Simulators / Training Devices process.
3	Review the Certificate Holder's manual to ensure that it contains policies, procedures, instructions and information necessary for the Simulators / Training Devices process.

Questions

	To meet this objective, the inspector must answer the following questions:	
1	Does the Certificate Holder's manual content meet the specific regulatory and FAA policy requirements for a Simulators / Training Devices process:	
1.1	Does the Certificate Holder's manual contain general policies for the Simulators / Training Devices process that comply with the specific regulatory requirements? SRRs: 121.135(b)(1); 121.407(a); 121.407(c); 121.407(d); 121.409(b); 121.409(d); SFAR 58.9(b)(3)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.2	Does the Certificate Holder's manual cite the regulatory requirements listed in the Supplemental Information section of this SAI? SRRs: 121.135(b)(3)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.3	Does the Certificate Holder's manual contain the duties and responsibilities for personnel who will accomplish the Simulators / Training Devices process? SRRs: 121.135(b)(2)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.4	Does the Certificate Holder's manual include instructions and information for personnel to meet the requirements of the Simulators / Training Devices process? SRRs: 121.135(a)(1)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.5	Does the Certificate Holder's manual specify procedures, instructions and information necessary to ensure it maintains the performance, functional, and other characteristics that are required for approval of each airplane simulator and training device? SRRs: 121.135(b)(16); 121.407(a)(2)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.6	Does the Certificate Holder's manual contain instructions and procedures to ensure that simulators and training devices are configured the same way as the	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

	airplane they represent? SRRs: 121.135(b)(16); 121.407(a)(3)	
1.7	Does the Certificate Holder's manual contain instructions and procedures to ensure the use of a daily discrepancy log to report discrepancies at the end of each training or check flight? SRRs: 121.135(b)(16); 121.407(a)(5)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
8	Does the Certificate Holder's manual specify that each flight training device to be used by the Certificate Holder or training center for any of the purposes set forth in paragraph (a)(1) of SFAR 58 section 9 must: SRRs: SFAR 58.9(a)(3)	
1.8.1	Be, or have been, evaluated against a set of criteria established by the Administrator for a particular qualification level of simulation? SRRs: SFAR 58.9(a)(3)(i)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.8.2	Be approved for its intended use in a specified AQP? SRRs: SFAR 58.9(a)(3)(ii)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.8.3	Be part of a flight simulator or flight training device continuing qualification program approved by the Administrator? SRRs: SFAR 58.9(a)(3)(iii)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.9	Does the Certificate Holder's manual require each training device approved for use in an AQP to be part of a continuing program to provide for its serviceability to perform its intended function as approved by the Administrator? SRRs: SFAR 58.9(b)(3)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.10	Does the Certificate Holder's manual require each training device approved for use in an AQP to be part of a continuing program to provide for its fitness to perform its intended function as approved by the Administrator? SRRs: SFAR 58.9(b)(3)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
1.11	If alternate procedures exist for use during irregular conditions, do the alternate procedures provide an equivalent level of safety to achieve the same results as the primary procedures?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable

SAI SECTION 1 - PROCEDURES ATTRIBUTE Drop-Down Menu	
1.	No procedures, policy, instructions or information specified.
2.	Procedures or instructions and information do not identify (who, what, when, where, how).
3.	Procedures, policy or instructions and information do not comply with CFR.
4.	Procedures, policy or instructions and information do not comply with FAA policy and guidance.
5.	Procedures, policy or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen's Charts, etc.).
6.	Procedures, policy or instructions and information unclear or incomplete.
7.	Documentation quality (e.g., unreadable or illegible).
8.	Procedures, policy or instructions and information inconsistent across Certificate Holder manuals (FOM - Flight Operations Manual to GMM - General Maintenance Manual, etc.).
9.	Procedures, policy or instructions and information inconsistent across media (e.g., paper, microfiche, electronic).
10.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
11.	Other.

SAI SECTION 2 - CONTROLS ATTRIBUTE

Objective: Controls are checks and restraints designed into a process to ensure a desired result. The questions in this section of the DCT are designed to assist the inspector in determining if checks and restraints are designed into the process to ensure the desired result is achieved. Controls should be written into the manual system to ensure that the most important manual policies, procedures, or instructions and information will be followed.

Controls may be in the form of administrative controls, which are secondary or supplemental written procedures. Like written procedures, administrative controls also need to provide answers to questions regarding who, what, when, where, and how. Controls may also be in the form of engineered controls, such as automated features or mechanical actions or devices (i.e., safety devices, warning devices, etc.).

Tasks

To meet this objective, the inspector must accomplish the following tasks:

- 1 Review the control questions below.
- 2 Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the controls that it has documented.

Questions

	To meet this objective, the inspector must answer the following questions:	
	Are the following controls built into the Simulators / Training Devices process:	
1	Is there a control in place to ensure that the simulators and training devices are configured the same way as the airplane they represent?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2	Is there a control in place to ensure that the Certificate Holder uses a maintenance log to report simulator and training device discrepancies?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3	Is there a control in place to ensure that the Certificate Holder uses a maintenance log to correct simulator and training device discrepancies?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4	Is there a control in place to ensure that the Certificate Holder upgrades its simulators and training devices to reflect operational / fleet changes and ensures that these changes were communicated to the training program and inspection department?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5	Is there a control in place to ensure that the Certificate Holder's simulators and training devices are configured to meet low altitude windshear training requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2.6	Does the Certificate Holder have a documented method for assessing the impact of any changes made to the controls in the Simulators / Training Devices process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

SAI SECTION 2 - CONTROLS ATTRIBUTE Drop-Down Menu	
1.	No controls specified.
2.	Documentation for the controls do not identify (who, what, when, where, how).
3.	Controls incomplete.
4.	Controls could be circumvented.
5.	Controls could be unenforceable.
6.	Resource requirements incomplete (personnel, facilities, equipment, technical data).
7.	Other.

SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE

Objective: Process measurements are used by the certificate holder to measure and assess its processes, to identify and correct problems or potential problems, and to make improvements to the processes. The questions in this section of the DCT are designed to assist the inspector in determining if the certificate holder measures or assesses information to identify, analyze, and document potential problems with the process. Process measurements are a certificate holder's internal evaluation or auditing of the most important policies, procedures, or instructions and information associated with an element.

To prevent the duplication of work, process measurements are most commonly addressed through a combination of auditing features contained in both the certificate holder's safety program/internal evaluation program (for operations and cabin safety-related issues) and the auditing function of the Continuous Analysis and Surveillance System (for airworthiness or maintenance/inspection-related issues). The director of safety and the quality assurance department often work together to accomplish this function for the certificate holder. This approach requires amendment of the safety program/internal evaluation program audit forms or checklists and the Continuous Analysis and Surveillance System audit forms or checklists to include the specific process measurements for each element.

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1	Review the process measurement questions below.
2	Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the process measurements that it has documented.

Questions

	To meet this objective, the inspector must answer the following questions:	
	Does the Certificate Holder's Simulators / Training Devices process include the following process measurements:	
1	Is there a process measurement that would reveal if simulators and training devices were not configured the same way as the airplane they represent?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
2	Is there a process measurement that would reveal if the Certificate Holder did not use a maintenance log to report simulator and training device discrepancies?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3	Is there a process measurement that would reveal if the Certificate Holder did not use a maintenance log to correct simulator and training device discrepancies?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4	Is there a process measurement that would reveal if the Certificate Holder did not upgrade its simulators and training devices to reflect operational/fleet changes and ensure that these changes were communicated to the training program and inspection department?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5	Is there a process measurement that would reveal if the Certificate Holder's simulators and training devices were not configured to meet low altitude windshear training requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.6	Does the Certificate Holder document its process measurement methods and results?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.7	Does the organization that conducts the process measurements have direct access to the person with responsibility for the Simulators / Training Devices process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

SAI SECTION 3 - PROCESS MEASUREMENT ATTRIBUTE Drop-Down Menu	
1.	No process measurements specified.
2.	Documentation for the process measurements does not identify (who, what, when, where, how).
3.	Inability to identify negative findings.
4.	No provisions for implementing corrective actions.
5.	Ineffective follow-up to determine effectiveness of corrective actions.
6.	Resources requirements (personnel, facilities, equipment, technical data).
7.	Other.

SAI SECTION 4 - INTERFACES ATTRIBUTE

Objective: Interfaces are used by the certificate holder to identify and manage the interactions between processes. The questions in this section of the DCT are designed to assist the inspector in determining whether or not interactions between the policies, procedures, or instructions and information associated with other independent processes within the certificate holder's organization are documented. Written policies, procedures, or instructions and information that are interrelated and located in different manuals within the certificate holder's manual system must be consistent and complement each other. For the interfaces to be effectively managed, it is not only important to identify what the interfaces are, but it is imperative to document the specific location of the interfaces within the certificate holder's manual system.

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1	Review the interfaces associated with the Simulators / Training Devices process that have been identified along with the individual questions in the Procedures Section (1) of this data collection tool.
2	Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the interfaces that it has documented.

Questions

	To meet this objective, the inspector must answer the following questions: NOTE: ALL EXPLANATIONS IN THE DROP DOWN MENU FOR "NO" ANSWERS MUST INCLUDE THE INDIVIDUAL QUESTION NUMBER FROM THE PROCEDURES SECTION (1) OF THIS DATA COLLECTION TOOL AND THE ELEMENT NUMBER(S) OF THE INTERFACE(S) THAT WERE NOT ADDRESSED.	
	Does the Certificate Holder's manual:	
4.1	Properly address the interfaces that are identified along with the individual questions in the Procedures Section (1)?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.2	Document a method for assessing the impact of any changes to the associated interfaces within the Simulators / Training Devices process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
4.3	List additional interfaces identified during the accomplishment of this SAI.	

SAI SECTION 4 - INTERFACES ATTRIBUTE Drop-Down Menu	
1.	No interfaces specified.
2.	The following interfaces not identified within the Certificate Holder's manual system:
3.	Interfaces listed are inaccurate.
4.	Specific location of interfaces not identified within the manual system.
5.	Other

SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTES

Objective: The questions in this section of the DCT address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified, and knowledgeable person who is responsible for the process, is answerable for the quality of the process, and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.)

Tasks

	To meet this objective, the inspector must accomplish the following tasks:
1	Identify the person who has overall responsibility for the Simulators / Training Devices process.
2	Identify the person who has overall authority for the Simulators / Training Devices process.
3	Review the duties and responsibilities of the person(s), documented in the Certificate Holder's manual.
4	Review the appropriate organizational chart.

Questions

	To meet this objective, the inspector must answer the following questions:	
	Are the following aspects of the Management Responsibility and Authority Attributes addressed in the Simulators / Training Devices process:	
5.1	Does the Certificate Holder's manual clearly identify who is responsible for the quality of the Simulators / Training Devices process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
5.2	Does the Certificate Holder's manual clearly identify who has authority to establish and modify the policies, procedures, instructions and information for the Simulators / Training Devices process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title:
5.3	Does the Certificate Holder's manual include the duties and responsibilities of those who manage the work required by the Simulators / Training Devices process? SRRs: 121.135(b)(2)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.4	Does the Certificate Holder's manual include instructions and information for those who manage the work required by the Simulators / Training Devices process? SRRs: 121.135(a)(1)	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.5	Does the Certificate Holder's manual clearly and completely document the authority for this position?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.6	Does the Certificate Holder's manual clearly and completely document their qualification standards for the person having responsibility for the Simulators / Training Devices process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.7	Does the Certificate Holder's manual clearly and completely document their qualification standards for the person having authority to establish and modify the Certificate Holder's policies, procedures, instructions and information for the Simulators / Training Devices process?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
5.8	Does the Certificate Holder's manual clearly and completely document the procedures for delegation of authority for the Simulators / Training Devices	<input type="checkbox"/> Yes

	process?	<input type="checkbox"/> No, Explain
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SAI SECTION 5 - MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTES Drop-Down Menu	
1.	Not documented.
2.	Documentation unclear.
3.	Documentation incomplete.
4.	Other.